

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

AMERICAN SEATING COMPANY,

Plaintiff,

CASE NO. 1:07-CV-1284

v.

HON. ROBERT J. JONKER

KUSTOM SEATING UNLIMITED, INC.,

Defendant.

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OPINION AND ORDER

Plaintiff American Seating Company (“American Seating”) brings this action for patent infringement under Title 35 of the United States Code. American Seating owns United States Patents 4,917,931 (the “‘931 Patent”) and 5,061,539 (the “‘539 Patent”), both entitled “Vandal Resistant Upholstered Seat.” (Compl., docket # 1, ¶ 5 and Exs. A, B.) In its complaint, American Seating alleges that Kustom Seating Unlimited (“Kustom”) has infringed the ‘931 and ‘539 Patents by selling vandal-resistant seat inserts that have features the patents encompass. (*Id.* at ¶¶ 6–8.) Only American Seating’s claims under the ‘931 Patent remain at issue, because American Seating confirmed at oral argument that it is no longer pursuing its claims under the ‘539 Patent. Kustom seeks summary judgment based on two alternative theories (docket ## 51, 52), positing that either the ‘931 Patent is invalid, or that even if the Patent is valid, Kustom’s seat inserts do not infringe. The Court has carefully reviewed the record and has heard oral argument on Kustom’s motions for summary judgment. This opinion focuses on and grants Kustom’s motion for summary judgment of non-infringement (docket # 51).

Background

Both American Seating and Kustom manufacture and sell seats for use in public transportation systems. At issue in this case is a type of seat insert that fits into a detachable seat frame. As separate parts, these individual seat inserts can be removed from their frames and replaced as they become worn or soiled, extending the useful life of seat frames. American Seating claims that Kustom has manufactured and sold seat inserts “nearly identical” to American Seating’s patented VR50 seat insert. (Pl.’s Br. in Opp. to Def.’s Mot. for Summ. J., docket # 63, at 1.) The accused Kustom seat inserts fit into a seat frame American Seating manufactures and sells and for which American Seating uses the VR50 seat insert. (*Id.*) The Kustom seat insert and the VR50 closely resemble each other structurally, and each is upholstered in a particular type of vertical pile fabric purchased from the same supplier. (*Id.*) Kustom Seat inserts can be used to replace VR50 inserts.

The principal difference between the American Seating VR50 seat insert and the accused Kustom seat insert on the summary judgment record has to do with the type and strength of the adhesive bond affixing the vertical pile fabric to the fiberglass substrate of the seat insert. (*Id.* at 2.) The adhesive American Seating uses creates a stronger bond between the upholstery and substrate than does the adhesive Kustom uses. (*Id.*) The parties dispute whether this distinction meaningfully differentiates the two products such that the Kustom insert does not infringe the ‘931 Patent. The parties propose competing constructions of key claim terms to support their respective positions. The Court will first resolve the relevant claim construction disputes, and then address Kustom’s summary judgment motion on infringement issues.

Analysis

I. Claim Construction

When there is a dispute about the meaning of language used in a claim, the court must determine the scope of the exclusive rights the patent claims. *Markman*, 52 F.3d at 979. “In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to ‘particularly point[]out and distinctly claim[] the subject matter which the patentee regards as his invention.’ 35 U.S.C. § 112, ¶ 2.” *Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1298 (Fed. Cir. 2003) (quoting *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001)). The Court must give claim terms the ordinary and customary meaning ascribed to them by ‘a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.’ *Phillips*, 415 F.3d at 1313. This “starting point is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.” *Id.* A court must also consider the written description in the patent, “because it is relevant not only to aid in the claim construction analysis, but also to determine if the presumption of ordinary and customary meaning is rebutted.” *Brookhill-Wilk 1, LLC*, 334 F.3d at 1298. The prosecution history may also “inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.” *Phillips*, 415 F.3d at 1317.

A court may rely on extrinsic evidence, such as dictionaries, treatises and expert or inventor testimony in constructing patent claims. *See Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363 (Fed.

Cir. 2003). However, the intrinsic evidence of the specification and prosecution history is generally more reliable and therefore is generally entitled to greater weight. *See id.* at 1320-21. Both intrinsic and extrinsic evidence can facilitate a proper claim construction, but ultimately, the language of the claims themselves must control. “[T]he court’s focus [must] remain[] on understanding how a person of ordinary skill in the art would understand the claim terms. *Id.* at 1323. Thus, “[t]he construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* at 1316 (quoting *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1995)).

The parties have proposed the following constructions for relevant disputed claim terms:

Patent Language	Kustom's Proposed Construction	American Seating's Proposed Construction
All asserted claims: "high strength adhesive"	An adhesive providing a bond strength materially greater than the bond strength used in prior art upholstery applications and sufficient to render the seating insert vandal resistant.	A high strength adhesive is one that provides a bond sufficient to deter or discourage vandals from peeling the fabric from the substrate during a trip normally undertaken on intra-city public transportation.
Claims 1, 3-5, and 7-10; "a bond strength sufficient to resist peeling of the fabric from the substrate"	The bond strength of the high strength adhesive is sufficient to prevent a person from being able to manually peel the fabric from the substrate.	The bond strength of the high strength adhesive must deter or discourage peeling by a vandal during a trip normally undertaken on intra-city public transportation.
All asserted claims: "vandal resistant" seat insert	A vandal resistant seat insert is designed and constructed to resist intentional defacing and destruction.	An upholstered seat is vandal resistant if it hides cuts in the fabric made by a vandal with a razor or knife and has fabric bonded to a substrate in a manner that deters or discourages vandals on intra-city public transportation.

The parties agree that a person with ordinary skill in the art as to these claims would be an engineer. It is “well-settled . . . that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.” *Phillips*, 415 F.3d at 1313. Keith McDowell, an inventor of the ‘931 Patent, holds a B.S. in civil engineering and

an M.S. in structural engineering. (McDowell dep., Def.’s Ex. 201, at 10.) Mr. McDowell himself describes other practitioners with ordinary skill in the art as having engineering degrees and several years of experience in the seating industry. (McDowell dep., Def.’s Ex. 201, 305-07.)

A. Construction of “high strength adhesive” and “bond strength sufficient to resist peeling of the fabric from the substrate”

This Court views the terms “high-strength adhesive” and “bond strength sufficient to resist peeling of the fabric from the substrate” as inextricably linked. The summary judgment record demonstrates that one ordinarily skilled in the art would not attribute an independent definition to “high-strength adhesive,” but rather would understand the term in the context of the adhesive’s performance. Indeed, the record contains no basis on which to construe “high-strength adhesive” independently. On the contrary, American Seating’s adhesives expert, Dr. Hartshorn, reports that “there is no accepted definition of the term high-strength adhesive.” (Def.’s Ex. 136.) Instead, he says, a functional definition applies: “[t]he adhesive must be sufficiently strong for the application and may be referred to as ‘high strength’ simply because it has the level of performance required.” (*Id.*) The Court agrees that a functional definition is proper here. This is also consistent with the Federal Circuit Court’s 2004 decision addressing the construction of “high strength adhesive.” *See American Seating Co. v. USSC Group, Inc.*, 91 Fed. Appx. 669, 676-77 (2004) (acknowledging, at least implicitly, that “high strength adhesive” in the ‘931 Patent had to be understood in terms of the bond strength the adhesive created). In the ‘931 Patent, the required performance of the “high strength adhesive” is to create “a bond strength sufficient to resist peeling of the fabric from the substrate.” (Def.’s Ex. 1.)

The question then becomes how to construe “bond strength sufficient to resist peeling of the fabric from the substrate.” American Seating proposed construction states, “The bond strength of the high strength adhesive must deter or discourage peeling by a vandal during a trip normally undertaken on intra-city public transportation.” American Seating’s proposed construction lacks objectivity. It hinges on the necessarily subjective experience of a hypothetical vandal on a “normal” trip taken on public transportation within an undefined city. American Seating’s proposed construction is too vague to serve the public notice function a patent provides. *See Markman*, 517 U.S. at 373 (quoting *McClain v. Ortmyer*, 141 U.S. 419, 424 (1891) (“[A] patent must describe the exact scope of an invention . . . to ‘secure to [the patentee] all to which he is entitled, [and] to apprise the public of what is still open to them.’”). In application, the proposed construction would first require one to determine how persevering a typical vandal would be – to posit, in effect, a “reasonably aggressive vandal.” Next, one would need to decide what a normal intra-city trip might be. In any given city, and among different cities, “normal” travel could mean a multitude of different things. The range of putative vandals and potential intra-city trips defies quantifying. Certainly, one skilled in the art of engineering – the relevant art here – would have no basis to address these questions using recognized tools in the discipline. American Seating’s adhesives expert, Dr. Hartshorn, concedes that he has no expertise in vandal psychology and no experience in determining what might deter or discourage a vandal from performing an act of vandalism. (Hartshorn dep., Pl.’s Ex. 13, 181-84.) The tests Dr. Hartshorn applied to formulate his report could not reliably measure the nebulous likelihood that a vandal would be deterred or discouraged by the strength of the adhesive bond. (*See* Def.’s Ex. 136.)

Nor does Plaintiff's proposed construction comport with the intrinsic evidence. Nothing in the language of the claims or specifications suggests that the subjective perseverance of an urban vandal dictates the scope of the claims. The patent itself contains not a word about the psychology of vandalism or the sociology of public transportation use. On the contrary, the patent speaks throughout in terms of bond strength and peel strength, terms relevant to engineering, not social science. Indeed, Claims 2 and 11 of the '931 Patent refer to a specific peel strength. (Def.'s Ex. 1, Col. 6, 35-38; Col. 8, 37-40.) Though the language of the disputed claims does not make reference to specific peel strengths, the language does focus on bond or peel strength, not the perseverance of a reasonably aggressive vandal. Indeed, if the subjective thinking of a vandal underpinned the construction of the claim terms, it is difficult to see how the claims could survive the obviousness and indefiniteness challenges Kustom raises in its motion for summary judgment of invalidity. (docket # 52.)

Kustom proposes to construe "bond strength sufficient to resist peeling of the fabric from the substrate" to mean: "The bond strength of the high strength adhesive is sufficient to prevent a person from being able to manually peel the fabric from the substrate." Kustom's proposed construction offers a more objective framework consistent with the language of the '931 Patent itself. The patent makes numerous references to bond and peel strength. Claims 1, 2, 3, 6, 7, 8, 10 and 12 all speak of bond strength, peel strength, or both. (Def.'s Ex. 1.) The Summary of the Invention explicitly refers to bond strength and peel strength. (*Id.*) The Detailed Description of Preferred Embodiment describes a minimum bond strength to be illustrated by a minimum peel strength: "As a minimum standard, it is desired that the fabric to substrate bond exhibit a peel (stripping) strength after being fully cured . . . exceeding the tensile strength of the fabric or a minimum bond strength of at least

twenty-five (25) pounds per inch width of fabric.” (*Id.*) Both parties have acknowledged that bond strength and peel strength are familiar terms in the art of engineering. Indeed, there is a standard test used in the industry to determine bond and peel strength, the American Society of Testing and Materials (“ASTM”) Standard D 903 protocol, known as the “Standard Test Method for Peel or Stripping Strength for Adhesive Bonds” (the “ASTM peel test”). The record shows that one of ordinary skill in the relevant art would understand “bond strength sufficient to resist peeling of the fabric from the substrate” in the context of the industry’s objective measures of bond and peel strength, which is consistent with Kustom’s proposed construction.

The prosecution history of the patent also weighs in favor of Kustom’s proposed construction. In responding to an earlier Patent Office challenge of Claims 1, 3, 4 and 6 in the ‘931 Patent, American Seating described a seat insert with fabric attached to the substrate “by means of a high strength adhesive that bonds the fabric directly to the substrate with such strength that the upholstery cannot be peeled from the substrate.” (Def.’s Ex. 71) (emphasis added.) American Seating’s own description in its response to the Patent Office closely aligns with Kustom’s proposed construction.

Kustom’s proposed construction comports with the patent language, prosecution history and other record evidence. The Court adopts Kustom’s proposed construction for “bond strength sufficient to resist peeling of the fabric from the substrate.” As to all claims at issue, the Court construes “high strength adhesive” to mean “An adhesive providing a bond strength sufficient to prevent a person from being able to manually peel the fabric from the substrate,” and construes “a bond strength sufficient to resist peeling of the fabric from the substrate” to mean “The bond strength

of the high strength adhesive is sufficient to prevent a person from being able to manually peel the fabric from the substrate.”

B. No further Markman construction is necessary for the summary judgment analysis.

Though the parties have proposed competing constructions of “vandal resistant insert,” the Court agrees with Kustom that construction is unnecessary. “Vandal resistant insert” appears in the preambles, not the bodies, of the claims at issue. The term here describes the purpose or intended use of the invention and does not limit the scope of the disputed claims. *See Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 952 (Fed. Cir. 2006) (citations omitted). The claim bodies describe a structurally complete invention, and “vandal resistant insert” is descriptive, not limiting. “[W]here a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation.” *Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997) (citations omitted). It is not necessary to construe “vandal resistant seat insert.”

Kustom’s motion (docket # 51) also includes a discussion of proposed constructions of certain claim terms relating to adhesive penetration or permeation of vertical pile fabric. These terms are irrelevant to the disposition of Kustom’s motion, which is premised on the theory that its seat inserts do not meet the claim limitations of “high strength adhesive” and “bond strength sufficient to resist peeling of the fabric from the substrate.” Accordingly, the Court need not construe these terms at this time.

II. Summary Judgment

Summary judgment is appropriate if “the pleadings, the discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law.” FED. R. CIV. P. 56(c)(2). A genuine issue of material fact exists if the evidence is such that a reasonable jury could return a verdict for the nonmoving party. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). In deciding a motion for summary judgment, the Court views the evidence and draws all reasonable inferences in favor of the nonmoving party. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986).

In the context of a patent infringement case, “[s]ummary judgment is appropriate when it is apparent that only one conclusion as to infringement could be reached by a reasonable jury.” *Techsearch, L.L.C. v. Intel Corp.*, 286 F.3d 1360, 1369 (Fed. Cir. 2002) (citing *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 540 (Fed. Cir. 1998)). Summary judgment of non-infringement is also proper “where the patent owner’s proof is deficient in meeting an essential part of the legal standard for infringement, because such failure will render all other facts immaterial.” *Id.* (citing *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1537 (Fed. Cir. 1991)). There are two steps in a patent infringement analysis: (1) claim construction, and (2) application of the properly construed claim to the accused product. *Id.* (citing *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370 (1996)). Claim construction is a matter of law. *Id.* (citing *Cybor Corp. v. FAS Tech., Inc.*, 138 F.3d 1448, 1454 (Fed. Cir. 1998)). Whether an accused product contains an element corresponding to each claim limitation is a question of fact. *Id.* at 1369-70 (citing *Roton Barrier, Inc. v. Stanley Works*, 79 F.3d 1112, 1125 (Fed. Cir. 1996)). On this record,

American Seating has not created a genuine issue of fact precluding summary judgment of non-infringement using the claim terms as just construed by the Court.

To decide Kustom's motion for summary judgment of non-infringement (docket # 51), the Court need not determine the precise level at which the bond strength becomes insufficient to prevent a person from being able to manually peel the fabric from the substrate. The Court is not construing the claims as limited to any particular number of pounds per inch width of fabric ("ppi"). Indeed, general principles of claim construction, as well as the USSC decision, would suggest that the bond strength the claim describes could be somewhat less than 25 ppi. But what is essential under the Court's constructions of "high strength adhesive" and "bond strength sufficient to resist peeling of the fabric from the substrate" is that the bond strength be something other than easy for a person to peel. Yet on this record, even American Seating agrees that the Kustom seat insert bond is "very easy to peel" under the applicable industry standard test. (*See* (Hartshorn dep., Def.'s Ex. 208, at 120.) Accordingly, summary judgment for Kustom is appropriate.

The accused Kustom product has, on average, a bond strength of 7 ppi. (Def.'s Ex. 68.) It is beyond genuine dispute that the fabric is easy to peel at this level using the ASTM peel test. American Seating's own expert testified that 7 ppi would be "very easy to peel" using the ASTM test. (Hartshorn dep., Def.'s Ex. 208, at 120.) A bond that is easy to peel simply cannot fall within the claim limitations of the '931 Patent. The prosecution history shows that American Seating effectively acknowledged this by responding to the Patent Office challenge with a description of fabric bonded to the substrate "by means of a high strength adhesive that bonds the fabric directly to the substrate with such strength that the upholstery cannot be peeled from the substrate." (Def.'s Ex. 71) (emphasis added.)

American Seating argues that instead of relying upon the ASTM peel test, it would be more appropriate to consider the actual seat in use to gauge bond strength. The record belies the suggestion. The ASTM peel test is the one and only standard test used in the industry to determine bond strength. Claims 2 and 11 of the '931 Patent refer specifically to peel test results. (Def.'s Ex. 1, Col. 6, 35-38, Col. 8, 37-40.) An internal document of American Seating concerning an earlier model describes using a "Standard Peel Test" to determine adhesive bond strength. (Def.'s Ex. 18.) American Seating's internal specifications for the VR50 seat insert state, under the heading "Fabric Adhesion," that the "[f]abric to substrate bond shall be tested for peel (stripping) strength after 7 days aging in accordance with ASTM standard D-903-49." (Def.'s Ex. 73.) Mr. McDowell himself has stated explicitly that American Seating "followed the ASTM." (McDowell dep., Pl.'s Ex. 2, at 120.) Indeed, even the Chicago Transit Authority, a purchaser of seat inserts from both parties, refers to the ASTM peel test in its bid specifications. (Pl.'s Ex. 8.) On this record, the ASTM peel test is the only relevant test of bond strength upon which one with ordinary skill in the relevant art of engineering would rely.

American Seating attempts to create a question of fact with the expert report of Dr. Hartshorn and by referring to a product field test of sample Kustom seat inserts conducted by the Chicago Transit Authority. Neither point precludes summary judgment for Kustom. The record shows that it was customary for the Chicago Transit Authority to field test all kinds of products, not merely seat inserts. (Sandu dep., Pl.'s Ex. 5, at 15.) That the Chicago Transit Authority field tested Kustom inserts does not tend to show that one of ordinary skill in the relevant art would have understood bond strength in terms of endurance in the field. Dr. Hartshorn's expert report (Def.'s Ex. 136) is also beside the point. The most Dr. Hartshorn says based on his testing is that the Kustom seat

inserts would “deter a vandal from peeling the fabric from the substrate during the course of a short journey.” (*Id.* at 4.) Under the Court’s construction of the disputed claim terms, this conclusion is not germane. In fact, Dr. Hartshorn’s report establishes that the fabric of the Kustom inserts could be peeled manually once cut, reinforcing the propriety of summary judgment for Kustom using the Court’s claim construction of disputed terms. (*See id.*)

Kustom’s accused product, which even American Seating’s expert concedes is easy to peel using the ASTM test, does not fit within the claim limitations of “high strength adhesive” and “bond strength sufficient to resist peeling of the fabric from the substrate” as the Court has construed these terms. Accordingly, Kustom is entitled to summary judgment of non-infringement.

III. Other Issue

The parties have filed a bevy of motions in limine in anticipation of a possible trial. While the Court’s decision on summary judgment eliminates the need to resolve the motions in limine, one of the motions warrants further comment. Kustom moves to preclude American Seating from asserting a previously undisclosed – and as yet unspecified – theory of infringement under the doctrine of equivalents (docket # 81). American Seating opposes the motion in limine and asserts it was awaiting the Court’s claim construction to decide whether to assert infringement under an equivalents theory. (docket # 99.) American Seating may not raise a previously undisclosed infringement theory at this late date. Accordingly, the Court would grant Kustom’s motion if the case were proceeding to trial.

The Court carefully reviewed the summary judgment record in deciding Kustom’s summary judgment motions. Nowhere in its summary judgment briefing did American Seating even hint that it intended to assert a theory of infringement by equivalents if the Court granted Kustom’s motion

for summary judgment of non-infringement. Nor could American Seating have done so consistent with its prior infringement disclosures under the case management order (docket # 16). American Seating has never disclosed a theory of infringement based on equivalents in this case despite a deliberate and staged disclosure process. The deadlines in the case management order were based on the parties' joint status report, which the parties submitted as required by the Court's order scheduling the original Rule 16 scheduling conference. The parties' joint status report, provides specifically that "[i]f there is a contention by Plaintiff that there is infringement of any claims under the doctrine of equivalents, Plaintiff shall separately indicate this on its Claim Chart." (docket # 10.) Yet at no time during the pendency of the case has American Seating asserted infringement based on the doctrine of equivalents, whether on its Claim Chart or otherwise. Having failed to make the required disclosures, and having failed to brief the issue in the summary judgment record concerning infringement issues, American Seating has waived the opportunity to assert a theory under the doctrine of equivalents. *See* FED. R. CIV. P. 16(b)(3)(B) and (b)(4) (stating that a case schedule may be modified only for good cause and with the judge's consent); *see also Leary v. Daeschner*, 349 F.3d 888, 907-08 (6th Cir. 2003) (Where a party has no good excuse for its failure to timely comply with the scheduling order, and where it was aware of the possible claim but failed to pursue it until after summary judgment, the district court does not abuse its discretion in denying amendment). Accordingly, if the case were proceeding to trial, the Court would grant Kustom's motion in limine (docket # 81) and preclude American Seating from asserting an equivalents theory of infringement.

Conclusion

Given the Court's constructions of "high strength adhesive" and "bond strength sufficient to resist peeling of the fabric from the substrate, American Seating's claim that Kustom's accused

product infringes the '931 Patent cannot succeed, and Kustom is entitled to judgment as a matter of law. The Court's decision on infringement obviates the need to decide Kustom's Motion for Summary Judgment of Invalidity (docket # 52).

ACCORDINGLY, IT IS ORDERED:

1. Defendant Kustom Seating Unlimited Inc.'s Motion for Summary Judgment of Non-Infringement (docket # 51) is **GRANTED**, and American Seating Company's Complaint (docket # 1) is **DISMISSED WITH PREJUDICE**.
2. Defendant Kustom Seating Unlimited Inc.'s Motion for Summary Judgment of Invalidity (docket # 52) is **DISMISSED AS MOOT**.

Dated: February 4, 2010

/s/ Robert J. Jonker
ROBERT J. JONKER
UNITED STATES DISTRICT JUDGE